

DPM-3

Rugged Display Processing Module



Compact design and MIL-qualified Barco's DPM-3 computer is used for on-the-move operations in space-constrained crew stations of combat and tactical vehicles, and helicopters. The Barco DPM-3 delivers the latest MXM graphics and Intel® Mobile Core™ computing power, and is fully MIL qualified and field-proven.

The DPM-3 rugged computer is designed for optimal SWaP-C (Size, Weight, Power and Cost), offering the most compact package in its processing class, and ruggedization for the most extreme environments. Its modular and open architecture offers the possibility to create a complete, customized solution.

Real-time video processing

Barco's DPM-3 easily connects to a wide range of sensors and the discrete GPU enables hardware-accelerated image processing. The DPM-3 rugged computer features advanced video processing (e.g. image fusion) and offers high resolution video streaming functionality for improved situational awareness.

Product specifications**DPM-3**

General specifications	
Computing	Intel® Dual-Core™ i7-2655LE, 2x 2.2GHz, 8GB ECC RAM
Graphics card	Integrated Intel® HD Graphics 3000
Storage capacity	128GB Removable SSD, SATA II compliant (3 Gb/sec)
Inputs - Outputs	2x Intel PRO1000 Gigabit Ethernet port 6x USB 2.0 8x serial lines (RS232/RS422/RS485) 2x CAN bus, CAN 2.0B compliant HD audio in/out/micro AC 97 4x video inputs RS170, PAL/NTSC I/O isolated or buffered as applicable
Option slots	1x MXM 2x XMC 1x Vehicle I/O extension slot
Operating system	Microsoft Windows 7 Professional for Embedded Systems, 64-bit
Power Supply	28VDC, MIL-STD-1275D compliant, IES hold-up compliant
Power consumption	Power consumption 50W typ., 80W max (without heaters)
Dimensions	305 x 217 x 76mm / 12.00" x 8.50" x 3.00" (w x d x h)
Weight	5 kg / 11 lbs
Environmental	(MIL-STD-810G) Operating temperature: -46 to +65 °C (+71°C with limitations) Storage temperature: -46 to +85 °C Thermal shock: -46 to +85 °C Humidity: 95%, 60 °C Altitude: 15,000ft operating, 40,000ft non-operating Salt fog: 48-hours, 5% concentration Sand and dust: blowing sand/dust Ingress protection: 1 meter immersion for 30 minutes Vibration: Tracked Vehicle profile Shock: 40g, 23ms (6 shocks/axis)
EMI / EMC	(MIL-STD 461F) Ground army
Options	
Graphics upgrade	AMD® MXM E6760 GPU
Storage upgrade	256GB Removable SSD, SATA II compliant (3Gb/sec)
Barco Video XMC Board (VXB)	4x PAL/NTSC Video 1x RGB Input 2x HD-SDI Inputs 1x Gigabit Ethernet (GigE Vision or DEF-STAN 00-82 streaming) Gen-locking Real-Time video processing
Barco vehicle I/O extension board	16x digital input, contact to the vehicle chassis ground 4x digital outputs, 300 mA, referenced to the vehicle VBAT (32V max Low Side) 4x digital outputs, 2 A, referenced to the vehicle GND (High Side) 4x analog inputs (2 x 0 to 5V and 2 x 0 to 36V)
Serial I/O PMC	4x serial ports (RS-232/422/485)
Operating systems	Microsoft Windows XP, 32-bit RedHat Linux Enterprise Linux 6.x, 64-bit
Barco CommonSENSE Advanced	Includes advanced image processing functions such as fusion
Rugged keyboard	Includes integrated pointing device